

**SPECIFICATION SHEET**

|                                |   |
|--------------------------------|---|
| <b>SPECIFICATION SHEET NO.</b> | Q0114- RA65M53600L101   |
| <b>DATE</b>                    | Jan. 14 2023  |
| <b>REVISION</b>                | A1  |
| <b>DESCRIPTION</b>             | <p>MHz Thru-Hole Crystal Oscillator, L20.8*W13.2*H5.08mm</p> <p>Full- Size/14 pin, CO14 series</p> <p>65.5360000MHz, 5.0V, +/-50ppm, Symmetry 40/60</p> <p>Operating Temp. Range -40°C ~+85°C,</p> <p>1-10TTL//15pF, Supply Current 50mA Max, Tristate function -Disable</p> <p>Thru-Hole type, Packed in Tube, 25pcs/Tube</p> <p>RoHS/RoHS III compliant</p> |
| <b>CUSTOMER</b>                |   |
| <b>CUSTOMER PART NUMBER</b>    |   |
| <b>CROSS REF. PART NUMBER</b>  |   |
| <b>ORIGINAL PART NUMBER</b>    | TGS CO1450BGH00 BLF-65M5360   |
| <b>PART CODE</b>               | RA65M53600L101  |

**VENDOR APPROVE**

Issued/Checked/Approved



DATE: Jan. 14 2023

**CUSTOMER APPROVE**

DATE:

1/14/2023

**MHZ THRU-HOLE CRYSTAL OSCILLATOR CO14 SERIES**

**MAIN FEATURE**

- MHz Thru-Hole Crystal Oscillator L20.8\*W13.2\*H5.08mm
- Industry-standard
- Hermetically sealed package for reliability
- Tristate function -Disable
- Cross more competitors part
- RoHS/RoHS III compliant



**APPLICATION**

- Communication Electronics

**RFQ**

[Request For Quotation](#)

**PART CODE GUIDE**

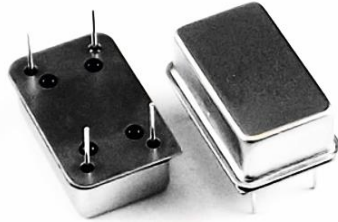
| RA | 65M53600 | L | 101 |
|----|----------|---|-----|
| 1  | 2        | 3 | 4   |

- 1) RA: Part family Code for MHz Thru-Hole Crystal Oscillator, L20.8\*W13.2\*H5.08mm, Full-Size/14 pin, CO14 series
- 2) 65M53600 Frequency range code for 65.53600MHz
- 3) L: Thru Hole type, Packed in Tube, 25pcs/Tube
- 4) 101: Specification code for original part No.: **TGS CO1450BGH00 BLF-65M5360**

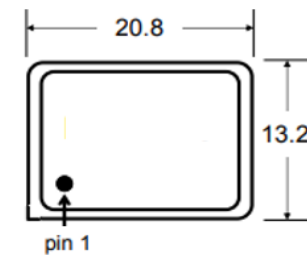
**MHZ THRU-HOLE CRYSTAL OSCILLATOR CO14 SERIES**

**DIMENSION (Unit: mm, Tol. +/-0.15mm)**

Image for reference

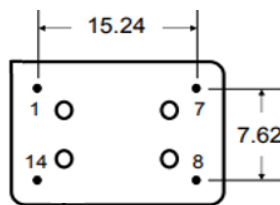
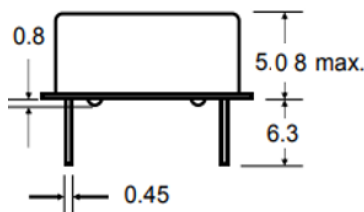


CO14



**Marking**

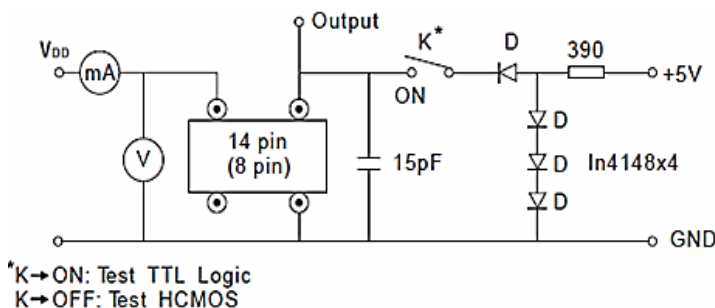
Line 1: 65.5360  
Line 2: Special Code



**Pin Function**

- #1 Tristate Disable
- #4 Ground
- #5 Output
- #8 VDD

**Circuit Principle**



**MHZ THRU-HOLE CRYSTAL OSCILLATOR CO14 SERIES**
**ELECTRICAL PARAMETERS**

| Parameter                                |                                | Part No. Symbol | Units  | Value                             |         |                     | Condition             |
|--|--------------------------------|-----------------|--|-----------------------------------|---------|---------------------|-----------------------|
|  |                                |                 |  | Min.                              | Typical | Max.                |                       |
| <b>Original Manufacturer</b>             |                                | TGS             | TGS Crystals   |                                   |         |                     |                       |
| <b>Holder Type</b>                       |                                | CO14            | MHz Thru-Hole Crystal Oscillator, CO14 Series, L20.8*W13.2*H5.08mm, Full-Size/14 pin |                                   |         |                     |                       |
| <b>Supply Voltage</b>                    |                                | 5               | V  | 5.0                               |         | +/-10%              |                       |
| <b>Enable/Disable -Tristate Function</b> |                                | 0               |  | Tristate function – Disable (N/A) |         | @ Control via pin 1 |                       |
| <b>Overall Freq. Tolerance</b>           |                                | B               | ppm  | -50                               |         | +50                 | @25°C                 |
| <b>Operating Temp. Range</b>             |                                | G               | °C   | -40                               |         | +85                 |                       |
| <b>Storage Temp. Range</b>               |                                |                 | °C   | -55                               |         | +125                |                       |
| <b>Symmetry</b>                          |                                | H               | %  | 40                                |         | 60                  |                       |
| <b>Output</b>                            | <b>V OH</b>                    |                 | V  | 90%                               |         |                     | High (Logic “1”)      |
|  | <b>V OL</b>                    |                 | V  |                                   |         | 10%                 | Low (Logic “0”)       |
|  | <b>Load</b>                    |                 | pF   | 50                                |         |                     |                       |
| <b>Output Waveform</b>                   |                                | 00              |  | 1-10TTL                           |         |                     | @OutputLoad 15pF      |
| <b>Startup Time</b>                      |                                |                 | ms   |                                   |         | 10                  |                       |
| <b>Supply Current</b>                    |                                |                 | mA   |                                   |         | 50                  |                       |
| <b>Rise/ Fall time</b>                   |                                |                 | ns   |                                   |         | 10                  |                       |
| <b>Phase Jitter</b>                      |                                |                 | ps   |                                   | N/A     |                     |                       |
| <b>Aging</b>                             |                                |                 | ppm/year   |                                   |         | ±3                  | @1 <sup>st</sup> year |
| <b>Others</b>                            | <b>Package</b>                 | B               | Thru - Hole type, Packed in Tube, 25pcs/Tube   |                                   |         |                     |                       |
|  | <b>RoHS Status</b>             | LF-             | RoHS III compliant   |                                   |         |                     |                       |
|  | <b>Add Value</b>               |                 | N/A  |                                   |         |                     |                       |
|  | <b>Internal Control Code *</b> |                 | N/A  |                                   |         |                     |                       |
| <b>Frequency Range</b>                   |                                | 65M536          | 65.536000MHz   |                                   |         |                     |                       |

Note: 1) Original Part Number: **TGS CO1450BGH00 BLF-65M5360**

2) \* Internal Control Code- 2 letter or digits; Blank: N/A

1/14/2023

**MHZ THRU-HOLE CRYSTAL OSCILLATOR CO14 SERIES**

**ENVIRONMENTAL AND TECHNICAL CONDITIONS**

| Test Items                   | Test Method And Conditions                                |
|------------------------------|---|
| Temperature Cycle            | Mil-std 883, Method 1010, 10 Cycles -20° C To 85° C       |
| Shock                        | Mil-std-202, Method 213, Test Condition C                 |
| Vibration                    | Mil-std-202, Method 204, Test Condition A                 |
| Resistance To Soldering Heat | Mil-std-202, Method 210, Test Condition B                 |
| Humidity                     | 85% Relative Humidity At 85° C 250 Hours                  |
| Gross Leak Test              | Mil-std-883, Method 1014, Test Condition C                |
| Fine Leak Test               | Mil-std-883, Method 1014, Test Condition A                |
| Terminal Strength            | Mil-std-202, Method 211, Test Condition A And C           |
| Moisture Resistance          | Moisture Resistance Mil-std 202, Method 106, Omit Step 7b |
| Solderability                | Mil-std-202, Method 208, 95% Coverage                     |
| Solvent Resistance           | Mil-std-202, Method 2002, Method 215                      |

**DISCLAIMER**

NextGen Components, Inc. reserves the right to make changes to the product(s) and or information contained herein without notice. No liability is assumed as a result of their use or application. No rights under any patent accompany the sale of any such product(s) or information

1/14/2023